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 NEWS  1           Web Page for STN Seminar Schedule - N. America
 NEWS  2  OCT 02   CA/CAplus enhanced with pre-1907 records from Chemisches
                   Zentralblatt
 NEWS  3  OCT 19   BEILSTEIN updated with new compounds
 NEWS  4  NOV 15   Derwent Indian patent publication number format enhanced
 NEWS  5  NOV 19   WPIX enhanced with XML display format
 NEWS  6  NOV 30   ICSD reloaded with enhancements
 NEWS  7  DEC 04   LINPADOCDB now available on STN
 NEWS  8  DEC 14   BEILSTEIN pricing structure to change
 NEWS  9  DEC 17   USPATOLD added to additional database clusters
 NEWS 10  DEC 17   IMSDRUGCONF removed from database clusters and STN
 NEWS 11  DEC 17   DGENE now includes more than 10 million sequences
 NEWS 12  DEC 17   TOXCENTER enhanced with 2008 MeSH vocabulary in
                   MEDLINE segment
 NEWS 13  DEC 17   MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary
 NEWS 14  DEC 17   CA/CAplus enhanced with new custom IPC display formats
 NEWS 15  DEC 17   STN Viewer enhanced with full-text patent content
                   from USPATOLD
 NEWS 16  JAN 02   STN pricing information for 2008 now available
 NEWS 17  JAN 16   CAS patent coverage enhanced to include exemplified
                   prophetic substances
 NEWS 18  JAN 28   USPATFULL, USPAT2, and USPATOLD enhanced with new
                   custom IPC display formats
 NEWS 19  JAN 28   MARPAT searching enhanced
 NEWS 20  JAN 28   USGENE now provides USPTO sequence data within 3 days
                   of publication
 NEWS 21  JAN 28   TOXCENTER enhanced with reloaded MEDLINE segment
 NEWS 22  JAN 28   MEDLINE and LMEDLINE reloaded with enhancements
 NEWS 23  FEB 08   STN Express, Version 8.3, now available
 NEWS 24  FEB 20   PCI now available as a replacement to DPCI
 NEWS 25  FEB 25   IFIREF reloaded with enhancements
 NEWS 26  FEB 25   IMSPRODUCT reloaded with enhancements
 NEWS 27  FEB 29   WPINDEX/WPIDS/WPIX enhanced with ECLA and current
                   U.S. National Patent Classification


 NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
              AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008

 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS LOGIN    Welcome Banner and News Items
 NEWS IPC8     For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that
specific topic.
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FILE 'HOME' ENTERED AT 13:38:02 ON 25 MAR 2008

=> file caplus

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FULL ESTIMATED COST	0.21	0.21

FILE 'CAPLUS' ENTERED AT 13:38:22 ON 25 MAR 2008
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FILE COVERS 1907 - 25 Mar 2008 VOL 148 ISS 13
FILE LAST UPDATED: 24 Mar 2008 (20080324/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

=> s (alkene or propene or propylene) and epoxidation and ("liquid alkene" or "liquid propene" or "liquid propylene" or "condensed alkene" or "condensed propylene" or "condensed propene") and (hydroperoxide or "hydrogen peroxide")

```
         37807 ALKENE
         88223 ALKENES
        101827 ALKENE
                (ALKENE OR ALKENES)
         76190 PROPENE
           783 PROPENES
         76528 PROPENE
                (PROPENE OR PROPENES)
        195786 PROPYLENE
           304 PROPYLENES
        195885 PROPYLENE
                (PROPYLENE OR PROPYLENES)
         15102 EPOXIDATION
           249 EPOXIDATIONS
         15136 EPOXIDATION
                (EPOXIDATION OR EPOXIDATIONS)
         26780 EPOXIDN
           582 EPOXIDNS
         26871 EPOXIDN
                (EPOXIDN OR EPOXIDNS)
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  28644 EPOXIDATION
          (EPOXIDATION OR EPOXIDN)
 817969 "LIQUID"
 142164 "LIQUIDS"
 924108 "LIQUID"
          ("LIQUID" OR "LIQUIDS")
1127520 "LIQ"
 106359 "LIQS"
1168065 "LIQ"
          ("LIQ" OR "LIQS")
1621350 "LIQUID"
          ("LIQUID" OR "LIQ")
  37807 "ALKENE"
  88223 "ALKENES"
 101827 "ALKENE"
          ("ALKENE" OR "ALKENES")
      66 "LIQUID ALKENE"
          ("LIQUID"(W)"ALKENE")
 817969 "LIQUID"
 142164 "LIQUIDS"
 924108 "LIQUID"
          ("LIQUID" OR "LIQUIDS")
1127520 "LIQ"
 106359 "LIQS"
1168065 "LIQ"
          ("LIQ" OR "LIQS")
1621350 "LIQUID"
          ("LIQUID" OR "LIQ")
  76190 "PROPENE"
    783 "PROPENES"
  76528 "PROPENE"
          ("PROPENE" OR "PROPENES")
      85 "LIQUID PROPENE"
          ("LIQUID"(W)"PROPENE")
 817969 "LIQUID"
 142164 "LIQUIDS"
 924108 "LIQUID"
          ("LIQUID" OR "LIQUIDS")
1127520 "LIQ"
 106359 "LIQS"
1168065 "LIQ"
          ("LIQ" OR "LIQS")
1621350 "LIQUID"
          ("LIQUID" OR "LIQ")
 195786 "PROPYLENE"
    304 "PROPYLENES"
 195885 "PROPYLENE"
          ("PROPYLENE" OR "PROPYLENES")
    755 "LIQUID PROPYLENE"
          ("LIQUID"(W)"PROPYLENE")
 127554 "CONDENSED"
  37807 "ALKENE"
  88223 "ALKENES"
 101827 "ALKENE"
          ("ALKENE" OR "ALKENES")
      1 "CONDENSED ALKENE"
          ("CONDENSED"(W)"ALKENE")
 127554 "CONDENSED"
 195786 "PROPYLENE"
    304 "PROPYLENES"
 195885 "PROPYLENE"
          ("PROPYLENE" OR "PROPYLENES")
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             5 "CONDENSED PROPYLENE"
               ("CONDENSED"(W)"PROPYLENE")
        127554 "CONDENSED"
         76190 "PROPENE"
           783 "PROPENES"
         76528 "PROPENE"
               ("PROPENE" OR "PROPENES")
             1 "CONDENSED PROPENE"
               ("CONDENSED"(W)"PROPENE")
         34180 HYDROPEROXIDE
         15594 HYDROPEROXIDES
         40638 HYDROPEROXIDE
               (HYDROPEROXIDE OR HYDROPEROXIDES)
       1049159 "HYDROGEN"
          6166 "HYDROGENS"
       1052587 "HYDROGEN"
               ("HYDROGEN" OR "HYDROGENS")
        228004 "PEROXIDE"
         48394 "PEROXIDES"
        247053 "PEROXIDE"
               ("PEROXIDE" OR "PEROXIDES")
        127005 "HYDROGEN PEROXIDE"
               ("HYDROGEN"(W)"PEROXIDE")
L1           8 (ALKENE OR PROPENE OR PROPYLENE) AND EPOXIDATION AND ("LIQUID
               ALKENE" OR "LIQUID PROPENE" OR "LIQUID PROPYLENE" OR "CONDENSED
               ALKENE" OR "CONDENSED PROPYLENE" OR "CONDENSED PROPENE") AND
               (HYDROPEROXIDE OR "HYDROGEN PEROXIDE")

=> d l1 1-8 abs ibib

L1   ANSWER 1 OF 8  CAPLUS  COPYRIGHT 2008 ACS on STN
AB   The method comprises epoxidizing liquid propylene with
     liquid organic hydroperoxide in the presence of a catalyst, wherein
     temperature of propylene gas introduced into the inlet of a compressor
     to compress is higher than that saturation temperature  The method prevents
the drain
     formation with supplying the gas at the temperature which is higher than
     dew-point temperature of the gas which is supplied to the compressor.
ACCESSION NUMBER:        2005:297624  CAPLUS
DOCUMENT NUMBER:         142:355703
TITLE:                   Method for production of propylene oxide
INVENTOR(S):             Shinohara, Koji; Omae, Shunichi
PATENT ASSIGNEE(S):      Sumitomo Chemical Co., Ltd., Japan
SOURCE:                  Jpn. Kokai Tokkyo Koho, 4 pp.
                         CODEN: JKXXAF
DOCUMENT TYPE:           Patent
LANGUAGE:                Japanese
FAMILY ACC. NUM. COUNT:  1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
     JP 2005089404        A     20050407    JP 2003-327709         20030919
PRIORITY APPLN. INFO.:                      JP 2003-327709         20030919

L1   ANSWER 2 OF 8  CAPLUS  COPYRIGHT 2008 ACS on STN
AB   A method is described for producing an epoxide (e.g., propylene
     oxide) comprising: (i) preparation of a stream (S1) containing a compressed
     liquid alkene (e.g., propylene); (ii) expansion
     of at a least part of the stream (S1) by heat absorption and at least
     partial evaporation of the liquid alkene; (iii) reaction of
     the alkene obtained according to step (ii) with a
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hydroperoxide (e.g., hydrogen peroxide) in the presence of at least one solvent (e.g., methanol) and at least one catalyst (e.g., titanium silicalite) to obtain a mixture containing the epoxide and the solvent(s).

ACCESSION NUMBER: 2004:902364 CAPLUS
DOCUMENT NUMBER: 141:380278
TITLE: Method for producing an epoxide
INVENTOR(S): Goebbel, Hans-Georg; Bassler, Peter; Teles, Joaquim Henrique; Rudolf, Peter
PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004092149	A1	20041028	WO 2004-EP4077	20040416
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10317520	A1	20041104	DE 2003-10317520	20030416
CA 2522466	A1	20041028	CA 2004-2522466	20040416
EP 1620415	A1	20060201	EP 2004-727858	20040416
EP 1620415	B1	20071121		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
BR 2004009425	A	20060425	BR 2004-9425	20040416
CN 1791587	A	20060621	CN 2004-80013456	20040416
US 2006276662	A1	20061207	US 2005-553516	20051014
IN 2005CN02639	A	20070831	IN 2005-CN2639	20051014

PRIORITY APPLN. INFO.: DE 2003-10317520 A 20030416
WO 2004-EP4077 W 20040416

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
AB In a system for manufacturing propylene oxide by epoxidn. of liquid propylene (I) with liquid organic hydroperoxide in the presence of a catalyst, ≥2 pumps are equipped in parallel in a passage, through which I is supplied. In this system, supply of I is ensured, thus preventing deactivation of the catalyst even in an emergency case where one of the I-supplying pumps is terminated.

ACCESSION NUMBER: 2003:274775 CAPLUS
DOCUMENT NUMBER: 138:272089
TITLE: System for manufacturing propylene oxide and its manufacture
INVENTOR(S): Katao, Masaaki; Omae, Shunichi; Shinohara, Koji
PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent

LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003104979	A	20030409	JP 2001-299008	20010928
PRIORITY APPLN. INFO.:			JP 2001-299008	20010928

L1 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
AB The invention relates to a method of regenerating a solid catalyst used for an epoxidn. of propylene and an organic peroxide such as cumene hydroperoxide in a reactor filled with the solid catalyst, wherein a liquid such as propylene passes through the reactor at a temperature higher than the maximum temperature of the epoxidn. by ≥5° to regenerate the solid catalyst.
ACCESSION NUMBER: 2002:704699 CAPLUS
DOCUMENT NUMBER: 137:222566
TITLE: Method of regenerating solid catalyst
INVENTOR(S): Tsuji, Junpei; Osaki, Shunichi
PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002263505	A	20020917	JP 2001-71781	20010314
TW 224523	B	20041201	TW 2002-91104030	20020305
CA 2440602	A1	20020919	CA 2002-2440602	20020307
WO 2002072255	A1	20020919	WO 2002-JP2102	20020307
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002236240	A1	20020924	AU 2002-236240	20020307
EP 1371414	A1	20031217	EP 2002-702781	20020307
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2002008058	A	20040302	BR 2002-8058	20020307
CN 1501839	A	20040602	CN 2002-806414	20020307
US 2004082800	A1	20040429	US 2003-471421	20030911
US 6982235	B2	20060103		
IN 2003CN01449	A	20051125	IN 2003-CN1449	20030915
PRIORITY APPLN. INFO.:			JP 2001-71781 A	20010314
			WO 2002-JP2102 W	20020307

L1 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
AB Titanovanadosilicalites are very selective and active catalysts in the epoxidn. of olefins by peroxides. Diluted H2O2 suffices to afford high yields of the epoxide. V incorporation at levels of Si:V = 100-2500 effectively changes the characteristics of the titanosilicalite into which it is incorporated to give near quant. conversion of propylene at selectivities >90%. For example, reacting liquid

propylene with H2O2 (30% aqueous solution) in MeOH for 6 h at 35°/500 psi under N in the presence of K-exchanged Ti-V-silicalite catalyst (average particle size 130 nm; preparation given) gave 95% propylene oxide with propylene conversion >99%.

ACCESSION NUMBER: 1998:263255 CAPLUS
DOCUMENT NUMBER: 128:321554
TITLE: Titanovanadosilicalites as epoxidation catalysts for olefins
INVENTOR(S): Nemeth, Laszlo T.; Lewis, Gregory J.; Rosin, Richard R.
PATENT ASSIGNEE(S): UOP LLC, USA
SOURCE: U.S., 7 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5744619	A	19980428	US 1997-818265	19970317
ZA 9806223	A	19990202	ZA 1998-6223	19980713
CA 2243009	A1	20000113	CA 1998-2243009	19980713
CA 2243009	C	20070619		
EP 978315	A1	20000209	EP 1998-305563	19980713
EP 978315	B1	20030924		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
ES 2206845	T3	20040516	ES 1998-305563	19980713
IN 1998DE01993	A	20060113	IN 1998-DE1993	19980713
CN 1241564	A	20000119	CN 1998-103371	19980714
AU 9876141	A	20000203	AU 1998-76141	19980714

PRIORITY APPLN. INFO.:
US 1997-818265 A 19970317
US 1997-840531 A 19970422
EP 1998-305563 A 19980713
JP 1998-199271 A 19980714

OTHER SOURCE(S): CASREACT 128:321554
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
AB Epoxides are prepared in the liquid phase by reacting an ethylenically unsatd. compound with 1 part organic hydroperoxide in 4-20 parts anhydrous organic solvent at 80-160° in the presence of molybdate catalyst. The molybdate, which has good solubility in the organic medium, a high concentration in Mo, very high catalytic activity, weak acidity, and high purity, is present in a concentration of 10-4 to 2 + 10-3 mole/kg. solvent and hydroperoxide. Thus, 400 g. com. MoO3.H2O containing 90% MoO3 was dissolved in 900 g. concentrated HCl (d. 1.19) preheated to 90°, the mixture cooled to room temperature, the molybdic chloride separated from the reaction mixture by extracting twice with a total of 2 l. Et2O, the ether solution dried and evaporated to give 905 g. colorless crystals, the crystals redissolved in dry ether, 440 g. propylene oxide in 500 cc. Et2O added to the solution at 10-15° during 3 hrs., the mixture stirred 1 hr. and the precipitate filtered off and washed with dry ether, water-saturated ether, and then dry ether and dried at 40° under vacuum to give 465 g. propylene glycol molybdate (MoO4C3H6) (I) containing 71.9% MoO3. I (1 g.) was dissolved in 1 g. propylene glycol at 100°, the product mixed with 500 g. tert-BuOH, 500 g. 99% tert-BuOOH added to give a

solution containing 5 + 10-3 g. atoms Mo/kg., 10 cc. of this solution and 20 cc. liquid propylene at -80° were sealed in a pressure-resistant glass tube, heated to 110°, cooled to -80°, and degassed to give a solution containing .apprx.10% propylene oxide with a 79% conversion of hydroperoxide.

ACCESSION NUMBER: 1969:471417 CAPLUS
DOCUMENT NUMBER: 71:71417
ORIGINAL REFERENCE NO.: 71:13231a,13234a
TITLE: Epoxides: molybdate catalysis
INVENTOR(S): Poite, Michel
PATENT ASSIGNEE(S): Naphtachimie
SOURCE: Fr., 5 pp.
CODEN: FRXXAK
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 1550166		19681220	FR	19670811

L1 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN

AB Olefins are contacted in the liquid phase with tert-BuOOH at 50-200° in the presence of a Mo metal catalyst whereby the ratio Mo metal surface to the number of g. hydroperoxide is 1-20 cm.2/g. Thus, 100 g. liquid propylene was contacted with 22.4 g. tert-BuOOH, 22.4 g. tert-BuOH, 140 g. xylene, and the Mo metal catalyst. The following results were obtained (ratio cm.2/g., reaction time, min. temperature, conversion in mol. %, and yield of epoxide with respect to converted hydroperoxide given): 23.3, 60, 110-11°, 90.8, 64.7; 23.3, 20, 110-11°, 52.7, 72.5; 3.9, 60, 110-11°, 82.5, 75.2; 3.9, 20, 110-11°, 32.1, 90.5; 23.3, 60, 105-6°, 73.5, 74.7; 3.9, 60, 105-6°, 75.7, 79.2. A mixture containing 1.73 g. 1-octene, 0.513 g. tert-BuOOH, and a Mo metal plate with a total surface of 1.8 cm.2 was heated at 102° and kept 20 min. at 102° (ratio Mo metal to tert-BuOOH was 3.5 cm.2/g.) to give a conversion of 37 mole % and a yield of 100 mole %.

ACCESSION NUMBER: 1967:432577 CAPLUS
DOCUMENT NUMBER: 67:32577
ORIGINAL REFERENCE NO.: 67:6155a
TITLE: Epoxides
PATENT ASSIGNEE(S): Atlantic Refining Co.
SOURCE: Neth. Appl., 8 pp. Addn. to Neth. Appl. 6517166
CODEN: NAXXAN
DOCUMENT TYPE: Patent
LANGUAGE: Dutch
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
NL 6605821		19670102	NL 1966-5821	19660429
DE 1568001			DE	
FR 89938			FR	
GB 1146202			GB	
PRIORITY APPLN. INFO.:			US	19650701

L1 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN

AB The title compds. are prepared by contacting C2-4 olefins with a C4-8 tert-alkyl hydroperoxide at 50-200° in an organic solvent containing at least 20% by weight hydrocarbon in the presence of metallic Mo or a

Mo compound Thus, expts. were carried out with 25 g. 94% tert-BuOOH and 0.05 g. Mo(CO)6 as catalyst while tert-BuOH and C6H6 were used as solvent. To this mixture was added 100 cc. liquid propylene and the reaction carried out 1 hr. at 110-11°. The following results were obtained (tert-BuOH in g., C6H6 in g., C6H6 % by weight, conversion in mole %, and yield of 1,2-epoxypropane in mole % given): 0, 125, 100, 92.2, 88.8 (at a reaction temperature of 106°); 25, 100, 80, 82.0, 89.3; 50, 75, 60, 70.8, 84.8; 75, 50, 40, 58.3, 86.0; 100, 25, 20, 47.0, 86.5; 125, 0, 0, 43.0, 77.2. A similar experiment with 25 g. tert-BuOOH, 0.05 g. Mo(CO)6, and 125 g. tert-BuOH and no hydrocarbon solvent gave, when treated with 100 cc. liquid propylene 1 hr. at 106°, 43.5 mole % conversion and 64.3 mole % yield of 1,2-epoxypropane. Under optimum conditions a yield of 75 mole % and a conversion of 89 mole % were obtained. Similarly, 22.4 g. tert-BuOOH (100 %), 22.4 g. tert-BuOH, 0.1 g. Mo(CO)6, 100 cc. liquid propylene allowed to react 1 hr. at 110-11° gave with 120 g. xylene (isomeric mixture) 93.7 mole % conversion and 70.0 mole % yield. The use of 140 g. xylene gave 91.7 mole % conversion and 80.2 mole % yield. The latter experiment carried out with other catalysts gave the following results (amount of catalyst, catalyst, conversion, and yield in mole % given): 0.05 g., MoCl5, 92.0, 82.0; 1.5 g., MoO2 (freshly prepared by reduction of Na2MoO4 with NH2.NH2), 95.0, 74.0; 0.1 g. powdered Mo, 92.1, 71.5.

ACCESSION NUMBER: 1967:432576 CAPLUS
DOCUMENT NUMBER: 67:32576
ORIGINAL REFERENCE NO.: 67:6154h,6155a
TITLE: Epoxides
PATENT ASSIGNEE(S): Atlantic Refining Co.
SOURCE: Neth. Appl., 12 pp. Addn. to Neth. Appl. 6517166
CODEN: NAXXAN
DOCUMENT TYPE: Patent
LANGUAGE: Dutch
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
NL 6605820		19670102	NL 1966-5820	19660429
DE 1568002			DE	
FR 89937			FR	
GB 1149344			GB	
PRIORITY APPLN. INFO.:			US	19650701

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	65.96	66.17

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-6.40	-6.40

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 13:41:07 ON 25 MAR 2008